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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/701,444

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Shinji Usuba

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EXAMINER

HYUN, SOON D

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

09/11/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/701,444

Applicant(s)

USUBA ET AL.

Examiner

Soon D. Hyun

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 10-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 10-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11/6/03
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 1, 2, 4, 6, 10, 13-15, and 18 are objected to because of the following informalities:

All acronyms (LAN, MAC, IP, CPU, TCP, UDP, PC, LANC) in the claims are spelled-out.

Each of claims 10 and 15 recites a limitation "adapted to" which is not a positive recitation. Under MPEP 2111.04, "language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim limitation."

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 10, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chau et al (U.S. Patent Number 5,550,906).

Re Claim 1, Chau et al teaches in fig. 1, a Switching node 33 (a LAN switching unit) include a plurality of switching fabric(s) 36 with interfaces (LAN interface) for interconnecting LANs (LAN hubs) to accommodate data communication for terminals

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37-39 (equipments) and Port Circuit 40 (a plurality set of telephone interfaces) interconnects a plurality of telephone devices 18, 19 (at least one telephones) wherein the sub-networks 11 and 12 are placed side by side (juxtaposed) for delivering voice data between the interfaces (See col. 4, lines 41 +) by the protocol converter (converting the voice data into MAC frames...relayed to LAN interface).

However, Chau et al fails to explicitly teach that "frames of fixed length, and only voice data converted into the MAC frames". Since the telephone device 18 only supports voice, it would have been obvious to only convert voice data to MAC frame because the telephone would only supplies voice data. Furthermore, G.723 codec are known to one skilled to code voice in fixed length to support telephony over LAN application. Hence, one skilled in the art would have been motivated to modify the MAC frame accordingly to the G.723 data length.

Therefore, it would have been obvious to one having ordinary skill in the art to transport voice data in frames of fixed length to support telephony over LAN application.

Re Claims 2, refer to Claim 1, further teaches a node processor (a CPU) to control the transmission and reception between the interfaces.

Re Claim 10, refer to Claim 1, Chau et al further fails to explicitly teach to perform a BORSCHT function. However, it is known that a BORSCHT function is commonly provided in the SLIC as well as optional battery backup.

Therefore, it would have been obvious to one having ordinary skill in the art to provide the BORSCHT function in the system of Chau et al for reliability.

Re Claim 12, refer to Claim 1, wherein switching node includes a switching fabric for the LAN hub.

Re Claim 13, refer to Claim 1, wherein the switching node includes MAC assembler.

4. Claims 3-5, 11, and 14-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chau et al (U.S. Patent Number 5,550,906) in view of Deng (U.S. Patent Number 5,862,134).

Re Claims 3, 4, 14, 15, 18, and 22, Chau et al teaches a protocol converter for converting voice data into LAN format, but fails to explicitly teach converting the data to TCP/IP or UDP/IP.

Deng teaches a data switch that is connected to WAN such as the Internet.

One skilled in the art would have been motivated to include TCP/IP or UDP/IP into the protocol converter of Chau et al to support VOIP application.

Therefore, it would have been obvious to one having ordinary skill in the art to combine the references to support VOIP application.

Re Claims 5, 11, 17, 19, and 20, refer to Claim 1, wherein the data switch is a router.

Re Claims 16 and 21, wherein the system includes a LAN interface to a LAN hub.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chau et al (U.S. Patent Number 5,550,906) in view of Chestnut (U.S. Patent Number 6,041,114).

Chau et al teaches in fig. 1, a Switching node 33 (a LAN switching unit) include a plurality of switching fabric(s) 36 with interfaces (LAN interface) for interconnecting LANs (LAN hubs) to accommodate data communication for terminals 37-39 (equipments) and at least one Port Circuit 40 (a plurality of ports) coupled to at least PBX (concentrators) wherein PBX is further coupled to a plurality of telephone (voice telephones) wherein (See col. 4, lines 41 +) by the LAN workstations (computing equipment) can voice communicate with the telephones via the switching node wherein figures 3-5 teaches the call establishment function (performing call control) between the LAN workstation and a telephone set wherein fig. 3.

However, Chau et al fails to explicitly teach that "wherein in case that a response from a...not obtained, arrival of call request is notified...use of control channel...voice telephone interface...on the call-in side."

Chestnut teaches in fig. 2, step 40 determines Network logon Device, NOT identity (is not obtained); steps 42, 50 determines telephone number and forwards (used of control channel...a voice telephone) the received call request via signaling channel (See col. 6, lines 9+).

One skilled in the art would have been motivated to redirect the call to a default telephone when the call-in side is not obtained for reliability.

Therefore, it would have been obvious to one having ordinary skilled in the art to combine the references to redirect the call to a default telephone when the call-in side is not obtained for reliability.

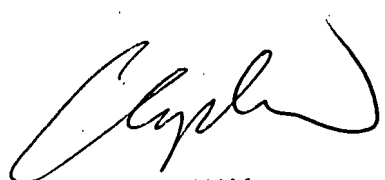
Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Soon D. Hyun whose telephone number is 571-272-3121. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


S. Hyun
9/5/2007


CHI PHAM
SUPERVISORY PATENT EXAMINER

9/7/07